CLAIMS

WHAT IS CLAIMED IS:

1. A radio base station apparatus comprising:

a receiving section for receiving a packet via a radio transmission path;

a judging section for judging the packet on whether or not an address designating a transmitting end thereof is in a predetermined range of addresses; and

a network interfacing section for routing the packet when a judgment result is true, and forwarding the packet to a radio base station when the judgment result is false, the radio base station forming a wireless zone adjacent to a wireless zone formed by a local station.

2. The radio base station apparatus according to claim 1, wherein

said network interfacing section forwards a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone.

3. The radio base station apparatus according to claim 1, wherein

said network interfacing section forwards the packet via a link when the judgment result is false, the link being formed between the radio base station apparatus and the radio base station forming the adjacent wireless zone.

4. The radio base station apparatus according to claim 2, wherein

said network interfacing section forwards the packet via a link when the judgment result is false, the link being formed between the radio base station apparatus and the radio base station forming the adjacent wireless zone.

5. The radio base station apparatus according to claim 1, wherein

said network interfacing section forwards the packet via a path when the judgment result is false, the path being formed between the radio base station apparatus and the radio base station forming the adjacent wireless zone.

6. The radio base station apparatus according to claim 2, wherein

said network interfacing section forwards the packet via a path when the judgment result is false, the path being formed between the radio base station apparatus and the radio base station forming the adjacent wireless zone.

7. The radio base station apparatus according to claim 3, wherein

said link is formed for each group of radio base stations individually forming adjacent wireless zones.

8. The radio base station apparatus according to claim 4, wherein

said link is formed for each group of radio base stations individually forming adjacent wireless zones.

9. The radio base station apparatus according to claim 1, wherein

said network interfacing section cooperates with a base station controlling station for executing channel control relating to the wireless zone formed by the local station and to the adjacent wireless zone, to determine a path to be used for forwarding a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone.

10. The radio base station apparatus according to claim 2, wherein

said network interfacing section cooperates with a base station controlling station for executing channel control relating to the wireless zone formed by the local station and its adjacent wireless zone, to determine a path to be used for forwarding a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone.

11. The radio base station apparatus according to claim 5, wherein

said network interfacing section cooperates with a base station controlling station for executing channel control relating to the wireless zone formed by the local station and its

adjacent wireless zone, to determine a path to be used for forwarding a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone.

12. The radio base station apparatus according to claim 6, wherein

said network interfacing section cooperates with a base station controlling station for executing channel control relating to the wireless zone formed by the local station and its adjacent wireless zone, to determine a path to be used for forwarding a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone.

13. The radio base station apparatus according to claim 1, wherein

said network interfacing section cooperates with a base station controlling station for executing channel control relating to the wireless zone formed by the local station and its adjacent wireless zone, to determine a link to be used for forwarding a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone.

14. The radio base station apparatus according to claim 1, further comprising

a monitoring section for gleaning transmission performance of a packet that arrives at the radio base station forming the adjacent wireless zone from a destination of the received packet, wherein

said network interfacing section forwards the arriving packet only to a radio base station at which the transmission performance gleaned by said monitoring section exceeds a predetermined threshold value.

15. The radio base station apparatus according to claim 1, further comprising:

a visiting base station determining section for determining one of the local station and the radio base station forming the adjacent wireless zone as a specific radio base station

which is the one receiving a packet latest and/or receiving a packet at a highest level; and

a downstream packet transmitting section for judging whether or not the specific radio base station is the local station, and transmitting a packet transmitted from a destination of the received packet to the radio transmission path when the judgment result is true, and to the specific radio base station when the judgment result is false.

16. The radio base station according to claim 1, further comprising:

a downstream packet distributing section for distributing a packet transmitted from a destination of the received packet to the radio base station forming said adjacent wireless zone; and

a downstream packet transmitting section for comparing the local station to the radio base station forming the adjacent wireless zone to judge whether or not the local station receives a packet latest at its receiving section and/or receives a packet at a highest level, and transmitting the packet transmitted from the destination of the received packet to the radio transmission path only when the judgment result is true.

17. An inter-network interfacing apparatus comprising:

a network interfacing section for allowing the inter-network interfacing apparatus to physically interface with three networks or more in which routing is executed for each packet; and

an inter-network interfacing section for executing routing among the three or more networks via said network interfacing section and forwarding to a specific network of the three or more networks a packet having a transmitting end with an address being not in a range of addresses allottable to terminals under the inter-network interfacing apparatus.

18. An inter-network interfacing apparatus comprising:

a network interfacing section for allowing two networks in which routing is executed for each packet to physically interface with a link laid between the inter-network interfacing

apparatus and a node; and

an inter-network interfacing section for executing routing between the two networks via said network interfacing section and forwarding a packet to the link, the packet being provided from one of the two networks and having a transmitting end with an address being not in a range of addresses allottable to terminals under the inter-network interfacing apparatus.

19. The inter-network interfacing apparatus according to claim 18, wherein:

said inter-network interfacing section discriminates a moment synchronizing with a packet having a transmitting end with an address being not in the range of addresses; and

said network interfacing section outputs a signal and the moment to the link together, the signal indicating a sequences of packets forwardable from the two networks to the link.